TITLE: STAND WITH FOLDABLE LEG UNITS BACKGROUND OF THE INVENTION

1. Field of the Invention

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The present invention relates to a stand, more particularly to a stand with foldable leg units.

2.Description of the Related Art

Referring to Figure 1, a conventional stand 1 is shown to include a support frame 11 having an oval-shaped holding frame portion 111, a plurality of legs 112,113 extending downwardly from the holding frame portion 111 to stand on a supporting surface, and left and right grip portions 114 extending outwardly and respectively from two opposite sides of the holding frame portion 111. A cooking utensil 12 can be disposed on the holding frame portion 111 of the support frame 11.

The conventional stand is disadvantageous in that the height of the support frame 11 is not adjustable, thereby limiting the range of use of the stand.

20 SUMMARY OF THE INVENTION

Therefore, the object of this invention is to provide a stand with foldable leg units, which is capable of overcoming the aforesaid disadvantage of the prior art.

According to the present invention, a stand is adapted to stand on a supporting surface, includes a holding frame and a plurality of spaced apart leg units.

The holding frame is adapted to support an article thereon. Each of the leg units includes an upper leg and a lower leg. The upper leg extends downwardly from the holding frame and has an upper end connected securely to the holding frame, and a lower end opposite to the upper end. The upper legs of the leg units cooperatively define a storage space below the holding frame. The lower leg has opposite upper and lower ends. The upper end of the lower leg is pivoted to the upper leg at a position adjacent to the lower end of the upper leg so as to be rotatable relative to the upper leg between a folded position, in which the lower legs of the leg units are disposed in the storage space, and in which the lower ends of the upper legs are adapted to be seated on the supporting surface, and an extended position, in which the lower ends of the lower legs are disposed at an elevation below the lower ends of the upper legs, and in which the lower ends of the lower legs are adapted to be seated on the supporting surface.

BRIEF DESCRIPTION OF THE DRAWINGS

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Other features and advantages of this invention will become more apparent in the following detailed description of the preferred embodiment of this invention, with reference to the accompanying drawings, in which:

Figure 1 is a perspective view of a conventional

stand when used for supporting a cooking utensil;

Figure 2 is a perspective view of the preferred embodiment of a stand according to the present invention in an extended position for supporting a gridiron thereon;

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Figure 3 is a perspective view of the preferred embodiment in a folded position;

Figure 4 is a fragmentary, exploded perspective view of the preferred embodiment, illustrating how a lower leg is pivoted to an upper leg;

Figure 5 is a fragmentary, partly sectional side view of the preferred embodiment, in which the lower legs are disposed in the folded position; and

Figure 6 is a fragmentary, partly sectional side view of the preferred embodiment, in which the lower legs are disposed in the extended position.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to Figures 2, 3 and 4, the preferred embodiment of a stand 2 according to the present invention is shown to include a metal annular holding frame 3 and a plurality of spaced apart leg units 4.

As illustrated, the holding frame 3 is adapted to support an article 20, such as a gridiron or a cooking utensil. The holding frame 3 is annular in shape and has a rectangular cross-section, and includes an annular inner face 33, an annular outer face 34 opposite to the annular inner face 33, and annular top

and bottom faces 31, 32 interconnecting the inner and outer faces 33,34. The holding frame 3 can be oval, rectangular or triangular in shape.

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Each of the leg units 4 extends downwardly from the holding frame 3, and includes an upper leg 41 that has an upper end 411 connected securely to the holding frame 3, a lower end 413 opposite to the upper end 411, and a C-shaped portion 412 which curves upwardly from the lower end 413 of the upper leg 41. The upper legs 41 of the leg units 4 cooperatively define a storage space 30 below the holding frame 3. Each of the leg units 4 further includes a lower leg 42 having opposite upper and lower ends 421,423, and a C-shaped portion 422 that curves upward from the lower end of the respective lower leg 42. The upper end 421 of the lower leg 42 is pivoted to the respective upper leg 41 at a position adjacent to the lower end 413 of the respective upper leg 41 so as to be rotatable relative to the respective upper leg 41 between a folded position (see Figures 3 and 5), in which the lower legs 42 are disposed in the storage space 30, and in which the lower ends 413 of the upper legs 41 are adapted to be seated on a supporting surface (G), and an extended position, in which the lower ends 423 of the lower legs 42 are disposed at an elevation below the lower ends 413 of the upper legs 41, and in which the lower ends 423 of the lower legs 42 are adapted to be

seated on the supporting surface (G), as shown in Figure 2.

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Each of the upper legs 41 has a pivot portion 414 that protrudes laterally therefrom into the storage space 30, that is disposed adjacent to the lower end 413 of the respective upper leg 41, and that is parallel to the holding frame 3. Each of the upper legs 41 further has an upper abutting portion 415 that extends downwardly and that is angled away from the pivot portion 414 toward the lower end 413 of the upper leg 41. Each of the lower legs 42 has a lower abutting portion 425 adjacent to the upper end 421 of the respective lower leg 42. Each of the leg units 4 includes shaft further a pivot 43 extending transversely through the pivot portion 414 of a respective one of the upper legs 41 and the upper end 421 of a respective one of the lower legs 42 to permit turning of the lower legs 42 about the respective pivot shafts 43 between the folded and extended positions. . When the lower legs 42 are disposed in the extended position, the lower abutting portions 425 of the lower legs 42 respectively abut against the upper abutting portions 415 of the upper legs 41 (see Figure 6).

Preferably, an annular reinforcing frame 5 is disposed below the holding frame 3, and is fastened to the pivot portions 414 of the upper legs 41 through a plurality of bolts 51 (only one is shown in the

drawings) so as to enhance rigidity and stability of the upper legs 41.

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In this preferred embodiment, each of the upper legs 41 includes first and second parts 41F,41S and a third part 41T sandwiched between the first and second parts 41F,41S. Each of the first, second and third parts 41F,41S,41T has opposite upper and lower ends. The upper ends of the first and second parts 41F,41S cooperatively define the upper end 411 of the respective upper leg 41. The bottom ends of the first, second and third parts 41F,41S,41T cooperatively define the lower end 413 of the respective upper leq 41. The upper end of the third part 41T defines the pivot portion 414 of the respective upper leg 41. Preferably, the first, second and third parts 41F,41S,41T of each of the upper legs 41 are hollow metal rods that are juxtaposed and that have ends bent to form the C-shaped portion 412 of the respective upper leg 41.

Each of the lower legs 42 includes first and second parts 42F,42S, each of which has opposite upper and lower ends. The upper ends of the first and second parts 42F,42S of each of the lower legs 42 cooperatively define the upper end 421 of the respective lower leg 42. The lower ends of the first and second parts 42F,42S of each of the lower legs 42 cooperatively define the lower end 423 of the

respective lower leg 42. The pivot portion 414 of each of the upper legs 41 is sandwiched between the upper ends of the first and second parts 42F,42S of the respective one of the lower legs 42. Preferably, the first and second parts 42F,42S of each of the lower legs 42 are hollow metal rods that are juxtaposed and that have ends bent to form the C-shaped portion 422 of the respective lower leg 42.

Referring to Figure 6, each of the leg units 4 further includes an L-shaped mounting bracket 419 having a horizontal portion 419H that interconnects the upper ends of the first and second parts 41F,41S of a respective one of the upper legs 41 and the bottom face 32 of the annular holding frame 31, and a vertical portion 419V that extends upward from the horizontal portion 419H and that is secured to the inner face 33 of the annular holding frame 31.

With this invention thus explained, it is apparent that numerous modifications and variations can be made without departing from the scope and spirit of this invention. It is therefore intended that the invention be limited only as indicated in the appended claims.